

KC-101 (US) 10/521,536.

Amendment/Response to Office action mailed

August 25, 2006

Page 22 of 32

RECEIVED  
CENTRAL FAX CENTER

DEC 26 2006

**III. REMARKS**

Reconsideration of the application is requested. The present amendments pertain to specification, claims, and abstract sections as well as corrections in drawings. Amended claims elements are to be construed to include substantial equivalents known to those of ordinary skill in the art. Applicants assert that the amendments are made without prejudice and reserve all rights to prosecute any canceled claims, and claims preceding any amendment, and other disclosed (but not presently claimed) embodiments in the application, in future continuation applications, divisional applications, continuation-in-part applications, continuing prosecution applications, requests for continuing examination, re-examination applications and any other application claiming priority from or through the present application.

- **Status of Claims:**

**Claim 46 has been amended to correct a punctuation matter. No new matter has been introduced with this amendment. Claims 1-46 are ready for examination. Support for the present claims may be found throughout the specification.**

KC-101 (US) 10/521,536.

Amendment/Response to Office action mailed

August 25, 2006

Page 23 of 32

***Allowable Subject Matter***

Claims 10, 17-20, 30 and 37-40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including of the limitations of the base claim and any intervening claims.

**Applicant's Response:**

Applicant gratefully acknowledges the Examiner's kind offer to allow aforementioned claims provided they are rewritten in independent form incorporating including all the limitations of the base claim and any intervening claims. However, Applicant respectfully submits that in view of the following assertions and the attached Rule 132 Affidavit by the first named inventor, the application is deemed in condition for allowance.

CT01/HOPPIA/236083.1

KC-101 (US) 10/521,536.

*Amendment/Response to Office action mailed*

August 25, 2006

Page 24 of 32

Applicant respectfully submits a Rule 132 affidavit composed and executed by the first-named inventor of the instant application.

Accordingly the Applicant asserts that the rejections under 35 U.S.C. 103 are improper over the cited references taken singly or in combination. Moreover, Applicant submits that the primary reference to Asanuma (US 5,920,819) is not even relevant to the claimed invention and therefore cannot be combined with the wide selection of secondary references, neither can its shortcomings be remedied by the secondary prior art.

The basic flaw of the Examiner's allegation of the Asanuma disclosure is found in the fact that the field of the instant invention is not even similar to the cited reference. In the first instance, the Frequency Division Multiple Access (FDMA) technology utilizes resources in the form of carrier frequencies wherein each pair of communicators is allocated a portion of the available frequencies for the entire time that communication is connected. In the Code Division Multiple Access (CDMA) systems, resources are power and code where a unique code is used to identify connections such that every communicator can avail himself of the whole spectrum all of the time. Thus a clear difference between the two multiple access schemes exists marking the incompatibility between the cited FDMA system and the inventive multiple access management with CDMA. Applicant asserts that the method relating to the FDMA as alleged by Asanuma is not even remotely suggestive of the instant CDMA type of multiple access scheme. Moreover, the claimed advantageous CDMA system is capable of a multipath signaling by using signals that can be received with different time delays. In contrast FDMA systems cannot discriminate between the multipath arrivals but have equalize to mitigate negative effects of multipath.

CT01/HOFFHA/236083.1

KC-101 (US) 10/521,536.

Amendment/Response to Office action mailed

August 25, 2006

Page 25 of 32

For example, the selected "carrier frequency" is assigned to the mobile station of the micro cell to permit communication based on TDD scheme between mobile station and micro cell base station. However, as presently claimed, there is "only one carrier frequency" band, which is the carrier frequency band of the whole CDMA system for both macro cell and micro cell networks. In addition, there is no TDD mode in the micro cell.

In view of the fundamental difference of Radio Resource Management (RRM) of the two systems for multiple access, it is impossible to extend an algorithm for RRM for the FDMA multiple access scheme to CDMA systems. Interference calculation, Radio Resource Management, Call Admission Control and the dynamics of FDMA systems are totally different when applied to CDMA systems.

In fact, the Asanuma schemes refer to a particular distinct frequency from a plurality of frequencies, as would be applicable for FDMA systems. To the contrary, the instant CDMA system spreads a waveform and gives each user a unique code pattern. As emphasized by the Applicant's affidavit, the abstract of Asanuma says: "When a channel for micro cell is assigned to a mobile station PS1 of a micro cell, one carrier frequency whose reception level is lower than a threshold level is selected from a plurality of up carrier frequencies and down carrier frequencies which a macro cell system holds, an up channel and a down channel for micro cell are set on the selected carrier frequency, the above channels are assigned to the mobile station PS1 of the micro cell to permit radio

KC-101 (US) 10/521,536.

Amendment/Response to Office action mailed

August 25, 2006

Page 26 of 32

communication based on the TDD scheme between the mobile station PS1 and a micro cell base station BSb1".

Despite the evident and known distinct difference of the instant CDMA system from reference FDMA system, the Examiner maintains that the Asanuma disclosure at column 12, line 15, can be also applied to a system using the TDMA scheme or CDMA scheme.

Applicant cannot find any description in Asanuma of how to extend his idea to CDMA systems: The reference drawings reveal a suggestion or solution to problems in FDMA overlays, which alleged problems do not exist in the field of CDMA communications.

In CDMA overlay systems, as there is not essentially large number of channels to be selected, there is therefore no need for this selection process at all, so the invention is completely useless for CDMA systems. Finally, the Asanuma disclosure at col. 6 (l. 21 and 44) specifies that FDMA is used as the radio access-duplex scheme.

For these reasons, Applicant respectfully asserts that the invention of Asanuma is only applicable to FDMA system characteristically having a plurality of distinct frequencies but not to the instant CDMA system which characteristically uses a single identical frequency band which is moreover a very different wide band technology than that used in the cited FDMA schemes.

KC-101 (US) 10/521,536.

Amendment/Response to Office action mailed

August 25, 2006

Page 27 of 32

***Claim Rejections – 35 USC § 103***

Claims 1-5, 7-8, 21-25, 41-44 and 46 have been rejected under 35 USC §103(a) as being obvious over Asanuma (US 5,920,819) in view of Rappaport (US 5,437,054) and further in view of Wheatley III, et al. (US 6,381,230).

With regard to base claims 1 and 46, the Examiner contends that Asanuma “*clearly shows and discloses*” an overlay cell mobile communication system performing radio communications, reading on the claimed operation of CDMA cellular communications system. As the Examiner admits that Asanuma is silent on selection of carrier frequencies based on power, the secondary reference to Rappaport et al. allegedly remedies this deficiency by disclosing a method for sharing channels in a cellular communication system.

Applicant respectfully disagrees. The cited combination of references neither discloses nor suggests the present invention. On the contrary, it asserted here that as far as CDMA systems is concerned there is no need or utility for applying the cited reference disclosure of a large number of channels to enhance frequency utilization for FDMA.

Thus, Applicant respectfully asserts that the distinct details differentiating the claimed invention from the references taken singly or in combination with any of the secondary references are fully supported by the instant Specification. In fact, as would be clear to one skilled in this art the Asanuma reference would not predict the instant invention even if it were possible to combine with the secondary references. Clearly, the case for *prima facie* obviousness under 35 USC 103(a) has not been made.

CT01/HOFFHA/236083.1

KC-101 (US) 10/521,536.

*Amendment/Response to Office action mailed*

August 25, 2006

Page 28 of 32

Since the amended base claims 1 and 21 are deemed allowable, all the rejected claims 2-5, 7-8, 22-25, 27-28, and 41-44, dependent from the base claims, are also deemed free of the cited references. The rejection under 35 USC 103 is therefore improper and should be withdrawn which favorable action is solicited.

Claims 6 and 26 are rejected under 35 U.S.C. 103(a) as being obvious over the combination of Asanuma (U.S. 5,920,819) and Rappaport et al. (U.S. 5,437,054), in view of Wheatley, III et al. (U.S. 6,381,230 B1), and in further view of Innes et al. (U.S. 6,061,565).

Applicant respectfully disagrees. On the contrary, claims 6 and 26, being dependent from allowable base claims 1 and 21, are also deemed allowable. The rejection under 35 USC 103 is therefore improper and should be withdrawn which favorable action is solicited.

Claims 9 and 29 are rejected under 35 U.S.C. 103(a) as being obvious over the combination of Asanuma (U.S. 5,920,819) and Rappaport et al. (U.S. 5,437,054), in view of Wheatley, III et al. (U.S. 6,381,230 B1), and in further view of Bloch (U.S. 6,765,898).

Applicant respectfully disagrees. On the contrary, claims 9 and 29, being dependent from allowable base claims 1 and 21, are also deemed allowable. The rejection under 35 USC 103 is therefore improper and should be withdrawn which favorable action is solicited.

Claims 11, 31 and 45 are rejected under 35 U.S.C. 103(a) as being obvious over the combination of Asanuma (U.S. 5,920,819) and Rappaport et al. (U.S. 5,437,054) in view of Wheatley, III et al. (U.S. 6,381,230 B1), and in further view of Yamashita (U.S. 6,256,500 B1).

CT01/HOFFHA/236083.1

KC-101 (US) 10/521,536.

Amendment/Response to Office action mailed

August 25, 2006

Page 29 of 32

Applicant respectfully disagrees. On the contrary, claims 11, 31 and 45, being dependent from allowable base claims 1 and 21, are also deemed allowable. The rejection under 35 USC 103 is therefore improper and should be withdrawn which favorable action is solicited.

Claims 12-13 and 32-33 are rejected under 35 U.S.C. 103(a) as being obvious over the combination of Asanuma (U.S. 5,920,819) and Rappaport et al. (U.S. 5,437,054), in view of Wheatley, III et al. (U.S. 6,381,230 B1), and in further view of Reemtsma (Pub U.S. 2002/0009998 A1). Consider claim 12, and as applied to claim 1, the combination of Asanuma and Rappaport et al., as modified by Wheatley et al., clearly shows and discloses the claimed invention except that the signals from the micro cell base station stops transmitting signals in order to maintain quality of service.

Applicant respectfully disagrees. On the contrary, claims 12-13 and 32-33, being dependent from allowable base claims 1 and 21, are also deemed allowable. The rejection under 35 USC 103 is therefore improper and should be withdrawn which favorable action is solicited.

Claims 14 and 34 are rejected under 35 U.S.C. 103(a) as being obvious over the combination of Asanuma (U.S. 5,920,819) and Rappaport et al. (U.S. 5,437,054), in view of Wheatley, III et al. (U.S. 6,381,230 B1), and in further view of Gorti et al. (Pub # U.S. 2003/01 89943 A1).

Applicant respectfully disagrees. On the contrary, claims 14 and 34, being dependent from allowable base claims 1 and 21, are also deemed allowable. The rejection under 35 USC 103 is therefore improper and should be withdrawn which favorable action is solicited.

CT01/HOFFHA/236083.1

KC-101 (US) 10/521,536.

Amendment/Response to Office action mailed

August 25, 2006

Page 30 of 32

Claim 15 is rejected under 35 U.S.C. 103(a) as being obvious over the combination of Asanuma (U.S. 5,920,819) and Rappaport et al. (U.S. 5,437,054), in view of Wheatley, III et al. (U.S. 6,381,230 B1), in further view of Kim et al. (Pub # U.S. 2003/0068983 A1).

Applicant respectfully disagrees. On the contrary, claim 15, being dependent from allowable base claim 1, is also deemed allowable. The rejection under 35 USC 103 is therefore improper and should be withdrawn which favorable action is solicited.

Claims 16 and 36 are rejected under 35 U.S.C. 103(a) as being obvious over the combination of Asanuma (U.S. 5,920,819) and Rappaport et al. (U.S. 5,437,054), in view of Wheatley, III et al. (U.S. 6,381,230 B1), and in further view of Amirijoo et al. (U.S. 6,728,217 B1).

Applicant respectfully disagrees. On the contrary, claims 16 and 36, being dependent from allowable base claims 1 and 21, are also deemed allowable. The rejection under 35 USC 103 is therefore improper and should be withdrawn which favorable action is solicited.

Claim 35 is rejected under 35 U.S.C. 103(a) as being obvious over the combination of Asanuma (U.S. 5,920,819), Rappaport et al. (U.S. 5,437,054), and Wheatley, III et al. (U.S. 6,381,230 B1), in view of Yamashita (U.S. 6,256,500 B1), and in further view of Kim et al. (Pub # U.S. 2003/0068983 A1).

KC-101 (US) 10/521,536.

*Amendment/Response to Office action mailed**August 25, 2006**Page 31 of 32*

Applicant respectfully disagrees. On the contrary, claim 35, being dependent from allowable base claim 21, is also deemed allowable. The rejection under 35 USC 103 is therefore improper and should be withdrawn which favorable action is solicited.

In view of the amendment and remarks set forth above, Applicant respectfully asserts that the rejection of the pending claims as amended under 35 USC 103 is improper. Applicant has made a good faith effort to place this application in condition for allowance, which favorable action is herewith solicited.

CTO1/HOPPHAV236083.1

PAGE 32/42 \* RCVD AT 12/26/2006 6:53:44 PM [Eastern Standard Time] \* SVR:USPTO-EFXRF-1/15 \* DNIS:2738300 \* CSID: \* DURATION (mm:ss):10-06

DEC 26 2006

KC-101 (US) 10/521,536.

Amendment/Response to Office action mailed  
August 25, 2006

Page 32 of 32

**CONCLUSION**

The Examiner is herewith invited to contact the undersigning agent for  
Applicant by telephone if the corrective action needs further amendment.

Respectfully submitted,



Dated: December 26, 2006.

Hans-Peter G. Hoffmann, PhD  
Reg. No. 37,352  
KELLEY DRYE & WARREN LLP  
400 Atlantic Avenue  
STAMFORD, CT 06901  
Telephone: 203-351-8011  
Facsimile: 203-327-2669  
e-mail: [hoffmann@kelleydrye.com](mailto:hoffmann@kelleydrye.com)